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Does free or lower cost smoking cessation medication stimulate quitting? Findings from the International Tobacco Control (ITC) Netherlands and United Kingdom Surveys.

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ABSTRACT

Objective: To investigate whether mentioning free or lower cost smoking cessation medication as a trigger for thinking about quitting is related to higher medication use, more quit attempts and quit success, and whether these associations are modified by education and income.

Methods: Data were derived from the 2013 and 2014 surveys of the International Tobacco Control (ITC) Netherlands (n=1164) and United Kingdom (n=768) cohort. Logistic regression analyses were used to assess associations between mentioning in 2013 that free/lower cost smoking cessation medication was a trigger for thinking about quitting smoking and the use of medication, quit attempts and smoking cessation in 2014.

Results: 37.0% of smokers in the UK and 24.9% of smokers in the Netherlands mentioned free/lower cost medication as a trigger for thinking about quitting. Smokers who mentioned this trigger were more likely to have used cessation medication during a quit attempt both in the UK (OR = 4.19, $p < 0.001$) and in the Netherlands (OR = 2.14, $p = 0.033$). The association between mentioning free/lower cost medication as a trigger for thinking about quitting and actual quit attempts was significant in the UK (OR = 1.45, $p = 0.030$), but not in the Netherlands (OR = 1.10, $p = 0.587$). There was no significant association with quit success. Associations did not differ across income and education groups.

Conclusion: Free/lower cost smoking cessation medication may increase the use of cessation medication and stimulate quit attempts among smokers with low, moderate, and high education and income.

INTRODUCTION

In Western countries, the proportion of smokers is not equally divided among low and high socioeconomic groups. [1-3] Individuals with lower education and income are more likely to smoke and smoke more cigarettes a day than higher educated and more affluent people. [4, 5] This disparity causes smoking to be the largest contributor to socioeconomic differences in health and mortality observed in Western countries. [6, 7] Although the proportion of people who smoke is generally declining, inequalities according to socioeconomic status (SES) have sustained or increased over time. [2, 3, 8-11] In the United kingdom (UK), 21% of individuals with no formal qualifications smoke compared to 9% of individuals with a degree. [12] In the Netherlands (NL), a comparable SES gap in smoking prevalence exists: 28% of lower educated adults smoke compared to 19% of higher educated adults. [13] In order to reduce this socioeconomic gap, it is vital to develop methods and policies effective for smokers with a lower socioeconomic status.

Having to pay for smoking cessation treatment like bupropion, varenicline or nicotine replacement therapy -from here on referred to as 'cessation medication'- can be a barrier for seeking treatment, particularly for people on a low income. [14] More smokers use cessation medication when it is cost-free, [15] and this can substantially increase the number of long term quitters. [16] In a study based on data from the International Tobacco Control (ITC) Europe surveys, respondents with lower education and income mentioned the availability of free/lower cost medication more often as a trigger for thinking about quitting smoking than other education and income groups. [17] Still, mentioning free/lower cost medication as a trigger for thinking about quitting does not necessarily lead to more use of medication, nor to more quit attempts and a greater likelihood of quit success. Data from the ITC Four Country surveys [18] suggested that mentioning free/lower cost medication as a trigger to think about quitting was positively associated with making a quit attempt. Yet, it was not examined

whether this association was dependent on respondents' income or education. Furthermore, it was not assessed whether free/lower cost medication as a trigger was associated with actual use of cessation medication and quit success.

In the current study, the ITC data from the UK and the Netherlands is used to investigate SES differences in mentioning free/lower cost medication as a trigger to think about quitting smoking and quitting behaviour. The cultural and economic similarities of the UK and the Netherlands make it interesting to compare these two countries. In both countries smokers have the opportunity to receive free/lower cost smoking cessation treatment. In the UK, the National Health Service provides smokers with free or subsidised cessation medication (dependent on smokers' income) by trained practitioners in routine practice and via the stop-smoking services; behavioural support can also be obtained free via the stop-smoking services for all. [19, 20] Stop smoking services vary across the UK but the standard model of treatment is an assessment before quitting which takes place about a week later, and then weekly sessions until four weeks after the quit date. [21] In the Netherlands, pharmacotherapy can be reimbursed once every year by the Dutch health insurance system only in combination with behavioural therapy, irrespective of treatment completion or outcome. There are possibilities for receiving behavioural therapy, such as the general practitioner, outpatient services, or independent healthcare providers registered in the Dutch quality register for scientifically proven effective smoking cessation treatment. Still, reimbursement applies only after patients have spent a mandatory deductible for general healthcare costs (at least 350 euro in 2013).

The aim of this study is to investigate whether in the UK and the Netherlands free/lower cost cessation medication mentioned as a trigger for thinking about quitting is related to use of medication, quit attempts and quit success and whether these associations are modified by education and income. It is hypothesized that smokers who mentioned free or lower cost

medication as a trigger were more likely to make a quit attempt, to use cessation medication and had higher quit rates. Moreover, it is expected that this association is stronger for smokers with lower income and education than smokers with higher income and education, as the cost of cessation treatment has been mentioned as a barrier to quitting smoking by smokers with lower income and education. [22, 23]

METHODS

Data were used from the 2013 and 2014 surveys of the ITC Netherlands and UK cohorts. The ITC Project is a prospective cohort study of a representative sample of smokers and ex-smokers in each country. [24] Survey data were collected by web (59%) and telephone (41%) for the UK and by web only for the Netherlands. Surveys were collected from February to September 2013 and from August to December 2014 in the UK, and from May to June 2013 and from May to June 2014 in the Netherlands. All respondents were current smokers at time of enrolment. More details on the methods of the ITC data collection can be found in previous publications. [24, 25] Drop out between the two survey waves was 18% for the Netherlands and 30% for the UK. In the current study, participants were selected of 18 years and older who participated in both waves and who smoked at least monthly in the 2013 survey. This formed a sample of n=1164 smokers from the Netherlands, and n=768 from the UK.

Free/lower cost medication as a trigger for thinking about quitting

The main independent variable of this study was whether respondents mentioned free/lower cost smoking cessation medication as a trigger for thinking about quitting. This is referred to as ‘free/lower cost medication as a trigger’ in the remainder of this paper. It was measured in the 2013 surveys with the following question: ‘In the past 6 months, has free, or lower cost, stop-smoking medication led you to think about quitting?’[17].

The question was part of a list with four policy triggers, of which each could be selected independently from the others by the respondent. The other triggers (which were not the focus in this paper) were: the price of cigarettes, smoking restrictions in public places and warning labels on cigarette packages. Response options were: 'not at all', 'somewhat' and 'very much'. For the analyses, the response options were dichotomized: 'not at all' was classified as no trigger for thinking about quitting; 'somewhat' and 'very much' was classified as a positive trigger for thinking about quitting smoking.

Use of smoking cessation medication

Participants in both countries were asked in the 2014 surveys whether they had previously used smoking cessation medications. In the Netherlands, respondents were asked about medication use in the last year while in the UK, medication use during the last quit attempt was assessed. Therefore, these survey items were not entirely comparable.

Quit attempts and quit success

To measure quit attempts, participants were asked the following question in the 2014 survey: 'Have you made any attempts (successful or not) to stop smoking in the last year? Participants who responded affirmatively on this question were defined as having made a quit attempt. Successful quitters were defined as current smokers in 2013 who reported having made a quit attempt and not smoking at all or less than once a month in 2014. [26]

Income and education

Respondents from the Netherlands were asked about their monthly gross household income while UK respondents reported their annual gross household income. Response categories also differed between the two countries. The income variables were recoded into three categories based on tertiles in each country: defined as 'low' if income <€2 000 (NL) or <£15 000 (UK), 'moderate' if between €2 000 and €3 000 (NL) or between £15 000 and £30 000

(UK) and 'high' if > €3 000 (NL) or >£30 000 (UK). Respondents had the option not to disclose their income. These responses were treated as missing values. The level of education for both countries was recoded into three groups: 'low' for none completed, elementary school and lower secondary education; 'moderate' for secondary vocational education and middle secondary education; and 'high' for upper secondary education, university and post-graduate.

Covariates

Several covariates were used in the analyses, including gender and age (divided into four categories: 18-24 years, 25-39 years, 40-54 years, and 55 years and older). Nicotine dependence was measured by the Heaviness of Smoking Index (HSI). [27, 28] The HSI is a score ranging from 0-6 (low to high nicotine dependence) and is calculated based on both the number of cigarettes smoked per day and the time before smoking the first cigarette after waking up.

Analyses

IBM SPSS version 21.0 [29] was used to analyse the data. Cross-sectional and longitudinal weights were calculated using age and gender for each country separately. [24] Three multivariate logistic regression analyses were used to analyse the data. The associations were assessed between mentioning free/lower cost medication as a trigger to quit and (1) use of smoking cessation medication, (2) making a quit attempt and (3) smoking cessation one year later. Covariates in all analyses were gender, age, and HSI. To account for possible "time-in-sample" effects where answers from respondents who have participated in multiple survey waves vary from newly recruited respondents, [30] analyses were adjusted for the respondents' number of times they participated in the survey. [31] Two-way interactions between education and trigger and between income and trigger were included in the analyses. Due to between-country differences in data collection and survey items, analyses were

conducted separately for the Netherlands and the UK. As secondary analyses, the other three policy triggers (the price of cigarettes, smoking restrictions in public places and warning labels on cigarette packages) were added as independent variables in separate multivariate logistic regression analyses.

RESULTS

Demographics

The socio-demographic characteristics of the respondents are presented in Table 1. The UK research sample had a higher percentage (53%) of high educated smokers than the Netherlands (25%) ($p < 0.001$). In the Netherlands, 30% of respondents did not report their household income, compared to 8% in the UK. Appendix 1 shows medication use, quit attempts and quit success for respondents who did and who did not disclose their income. Smokers in both countries had a comparable level of nicotine dependence ($p = 0.448$), with the largest group of respondents reporting an HSI between 2 and 4. Loss to follow up was higher among younger participants in both countries and higher among lighter smokers in the UK (Appendix 2).

Table 1. Characteristics of participants in the first wave in the UK and the Netherlands (2013). Weighted data.

	United Kingdom (n = 768)	The Netherlands (n = 1164)	Between country differences
Gender			
Female (%)	48.6	49.3	χ^2 (1) = 0.08 p = (0.777)
Age			
18-24 years (%)	11.9	12.8	χ^2 (3) = 4.90
25-39 years (%)	27.2	23.1	(p = 0.179)
40-54 years (%)	33.4	33.4	
55 years and older (%)	27.6	30.6	
Heaviness of Smoking Index			
0-1 (%)	27.5	29.6	χ^2 (2) = 1.61
2-4 (%)	65.8	63.0	(p = 0.448)
5-6 (%)	6.7	7.5	
Income level			
Low (%)	28.5	22.0	χ^2 (2) = 144.40
Moderate (%)	31.7	20.1	(p < 0.001)
High (%)	32.0	27.8	
Not reported (%)	7.7	30.1	
Educational level			
Low (%)	17.4	29.2	χ^2 (2) = 146.59
Moderate (%)	30.1	45.4	(p < 0.001)
High (%)	52.5	25.4	

Free/lower cost medication as a trigger for thinking about quitting

In 2013, free/lower cost medication was mentioned as a trigger for thinking about quitting by 24.9% of the respondents in the Netherlands and 37.0% of the respondents in the UK (results not shown in table). When comparing income groups, free/lower cost medication as a trigger was mentioned in the Netherlands by 30.7% of low income smokers compared to 20.9% of moderate income smokers and 21.1% of high income smokers (χ^2 (2) = 9.45, p = 0.009). In the UK, free/lower cost medication as a trigger was mentioned by 40.2%, 33.6% and 39.2% of low, moderate and high income groups respectively (χ^2 (2) = 2.47, p = 0.290). When education groups were compared, in the Netherlands 28.8% of smokers with low education, 25.7% of smokers with moderate education and 21.2% of smokers with high education mentioned free/lower cost medication as a trigger (χ^2 (2) = 4.98, p = 0.083). In the UK,

38.8% of smokers with low education, 41.1% of smokers with moderate education, and 34.1% smokers with high education mentioned free/lower cost medication as a trigger (χ^2 (2) = 3.17, p = 0.205).

Medication use

In the Netherlands, 31.2% of smokers who made a quit attempt in the last year and mentioned free/lower cost medication as a trigger, used smoking cessation medication in the last year compared to 15.8% who did not report this trigger (p = 0.001, Figure 1 and Table 2). In the UK, the medication use in the group of respondents that mentioned free/lower cost medication as a trigger was 54.8% compared to 29.2% in the group that did not report the trigger (p < 0.001, Figure 2). Free/lower cost medication as a trigger was also positively associated with medication use in a multivariate analyses both in the UK (OR = 4.19, p < 0.001) and in the Netherlands (OR = 2.14, p = 0.033) (Table 3). The multivariate analyses showed no significant interactions between free/lower cost medication as a trigger, medication use, and education and income groups. With the other policy triggers (smoking restrictions in public places, the price of cigarettes and warning labels on cigarette packages) added to the model, free/lower cost medication as a trigger was no longer significantly associated with medication use in the Netherlands (OR = 1.83, p = 0.113), but remained significant in the UK (OR = 4.26, p < 0.001) (results not shown in table).

Table 2. Medication use, quit attempts and quit success within the entire sample and within respondents who mentioned free/lower cost medication as a trigger (weighted data).

	Entire sample			Mentioned free/lower cost medication as a trigger		
	UK	NL	p-value	UK	NL	p-value
Medication use (%)	39.8	20.1	<0.001	54.8	31.2	<0.001
Quit attempts (%)	43.0	32.7	<0.001	48.2	36.2	0.003
Quit success (%)	35.2	28.5	0.064	34.1	19.3	0.014

Table 3. Multivariate logistic regression analyses[a] showing associations between free/lower cost cessation medication as a trigger for thinking about quitting smoking and medication use, quit attempts, and quit success in the UK and the Netherlands (weighted data).

	Medication use[a] OR (95% CI)		Quit attempts OR (95% CI)		Quit success[a] OR (95% CI)	
	UK	NL	UK	NL	UK	NL
Gender						
Female	0.67 (0.38 to 1.19)	0.70 (0.36 to 1.35)	1.04 (0.75 to 1.44)	0.79 (0.59 to 1.07)	1.28 (0.74 to 2.20)	1.95 (1.10 to 3.45)*
Male	1.00	1.00	1.00	1.00	1.00	1.00
Age						
18-24 years	1.67 (0.61 to 4.58)	0.14 (0.03 to 0.71)*	2.34 (1.33 to 4.13)**	1.18 (0.71 to 1.97)	0.60 (0.23 to 1.54)	0.33 (0.10 to 1.06)
25-39 years	0.97 (0.42 to 2.20)	0.53 (0.22 to 1.26)	1.89 (1.19 to 3.00)**	1.75 (1.16 to 2.65)**	0.78 (0.36 to 1.70)	0.95 (0.43 to 2.09)
40-54 years	0.66 (0.28 to 1.52)	1.21 (0.55 to 2.69)	1.27 (0.82 to 1.98)	1.04 (0.70 to 1.54)	0.69 (0.32 to 1.52)	1.11 (0.52 to 2.38)
55 years+	1.00	1.00	1.00	1.00	1.00	1.00
Heaviness of Smoking Index	0.99 (0.83 to 1.19)	1.38 (1.10 to 1.72)**	0.96 (0.86 to 1.07)	0.88 (0.79 to 0.97)*	0.85 (0.72 to 1.02)	0.74 (0.61 to 0.90)**
Trigger						
Yes	4.19 (2.33 to 7.53)***	2.14 (1.07 to 4.29)*	1.45 (1.04 to 2.02) *	1.10 (0.78 to 1.56)	0.99 (0.58 to 1.68)	0.58 (0.28 to 1.20)
No	1.00	1.00	1.00	1.00	1.00	1.00
Income level						
Low	1.47 (0.70 to 3.08)	1.68 (0.77 to 3.67)	0.76 (0.50 to 1.16)	1.12 (0.78 to 1.61)	0.65 (0.32 to 1.32)	0.45 (0.23 to 0.90)*
Moderate	0.64 (0.32 to 1.27)	2.00 (0.89 to 4.46)	0.74 (0.50 to 1.09)	0.74 (0.51 to 1.07)	0.62 (0.33 to 1.18)	0.43 (0.21 to 0.88)*
High	1.00	1.00	1.00	1.00	1.00	1.00
Education level						
Low	2.17 (0.87 to 5.46)	0.49 (0.19 to 1.22)	0.85 (0.52 to 1.38)	0.78 (0.51 to 1.20)	0.70 (0.29 to 1.68)	1.30 (0.56 to 2.98)
Moderate	0.49 (0.24 to 0.97)*	0.71 (0.32 to 1.56)	0.56 (0.38 to 0.82)**	0.84 (0.59 to 1.21)	0.53 (0.27 to 1.02)	1.11 (0.57 to 2.19)
High	1.00	1.00	1.00	1.00	1.00	1.00
Time-in-sample	0.85 (0.76 to 0.93)*	0.93 (0.80 to1.07)	0.96 (0.91 to 1.02)	0.98 (0.91 to 1.05)	1.03 (0.94 to1.13)	1.12 (0.98 to 1.28)

[a] Only participants who made a quit attempt in the last year
UK = United Kingdom, NL = Netherlands, Trigger = participant mentioned free/lower cost medication as a trigger for thinking about quitting smoking
*p < 0.05
** p < 0.01
*** p < 0.001

Quit attempts

A bivariate analysis showed that 36.2% of respondents in the Netherlands who mentioned free/lower cost medication as a trigger made at least one quit attempt between 2013 and 2014 compared to 31.5% who did not report this trigger ($p = 0.133$, see Figure 1). In the UK, these numbers were 48.2% versus 39.9% ($p = 0.025$, see Figure 2). The multivariate analyses showed that in the UK, respondents who mentioned free/lower cost medication as a trigger had a higher rate of quit attempts within the next year than those who did not report this trigger (OR = 1.45, $p = 0.030$), but this association was not found in the Netherlands (OR = 1.10, $p = 0.587$, see Table 3). There were no significant interactions between free/lower cost medication as a trigger and education and income levels for quit attempts in the multivariate analyses. When other policy triggers were added to the analysis as independent variables, free/lower cost medication as a trigger was no longer significantly associated with quit attempts in the UK (OR = 1.14, $p = 0.489$), and remained non-significant in the Netherlands.

Quit success

Within the group of smokers who made a quit attempt, in the Netherlands 19.3% of respondents who mentioned medication as a trigger quit smoking successfully compared to 32.0% who did not report this trigger ($p = 0.012$, Figure 1). In the UK, this was 34.1% versus 35.9% ($p = 0.728$, Figure 2). The multivariate analyses showed no significant association between free/lower cost medication as a trigger for thinking about quitting smoking and quit success (Table 3). The analyses showed no significant interactions between free/lower cost medication as a trigger and quit success for different income and education levels. With the other three policy triggers added to the model, the association between free/lower cost medication as a trigger and quit success remained not significant.

DISCUSSION

The aim of this study was to investigate whether mentioning free/lower cost medication as a trigger to think about quitting smoking was related to the use of cessation medication, quit attempts and quit success in the UK and the Netherlands, and whether these associations were modified by education and income. The results showed a positive association between mentioning free/lower cost medication as a trigger and the use of smoking cessation medication in both the UK and the Netherlands. This finding is in line with previous research, which showed that financial coverage leads to an increased utilization of smoking cessation medication. [15]

Smokers who mentioned free/lower cost medication as a trigger for thinking about quitting smoking were more likely to have made a quit attempt a year later in the UK, but not in the Netherlands. The association between free/lower cost medication as a trigger to quit smoking and quit attempts has also been demonstrated in Canada, the USA and Australia. [18] The finding that there was no significant association between free/lower cost medication as a trigger and quit attempts in the Netherlands may result from the difference in availability of free/lower cost medication compared to the UK. The UK's stop smoking services and health professionals provide subsidised medications for any smokers who want to quit, while in the Netherlands health insurance reimbursement for smoking cessation medication is only available after a mandatory deductible amount is first spent. Not being able to receive free medication could demotivate smokers to follow through with their intended quit attempt. [22, 32]

Smokers who mentioned free/lower cost medication as a trigger were not more likely to quit successfully which emphasizes that it is a large step from contemplating quitting to actually achieving this goal. Firstly, there may be barriers preventing smokers to start and sustain a

quit attempt with medication, such as availability of free medication, self-efficacy and motivation. [32-35] Likewise, many factors can influence whether a quit attempt leads to successful quitting. [36] The current study did not investigate which hindering or promoting factors influence the relation between free/lower cost medication as a trigger and quit success, but further research focussing on this question could give important insights in how to achieve quit success in smokers who are triggered to think about quitting by free medication.

When the other policy triggers (smoking restrictions in public places, the price of cigarettes and warning labels on cigarette packages) were added to the analyses, the associations between free/lower cost medication as a trigger and the use of medication in the Netherlands, and quit attempts in the UK were no longer significant. However, the association between free/lower cost medication as a trigger and the use of smoking cessation medication in the UK remained significant after correcting for the other policy triggers, which makes this the most robust finding of this study.

Another aim of this study was to investigate whether the income and education level of smokers influenced the association between mentioning free/lower cost medication as a trigger to quit smoking and use of cessation medications, quit attempts, and quit success. Contrary to our hypothesis, the results showed that this association was not influenced by education or income level. This may mean that smokers with a lower SES as well as smokers with a higher SES who are triggered to think about quitting smoking by free cessation medication are equally likely to use medication, to make a quit attempt, and potentially be successful in this attempt.

Limitations

This study has some limitations that should be taken into consideration. The validity of the survey question about whether respondents considered free/lower cost medication as a trigger to quit smoking was assumed but not investigated in this study. Loss to follow-up was higher among younger respondents in both countries, which could have influenced the results since research has shown that young adults were more likely to try quitting smoking, were more successful in quitting and were less likely to use cessation medication than older adults. [37, 38] The UK and Netherlands data were not completely comparable since there were significant differences in income and education levels and differences in measuring the use of smoking cessation medication. In the UK, medication use was measured for the last quit attempt while in the Netherlands it was measured for the last year. Therefore, the use of cessation medication may have predated the (by free medication triggered) thought about quitting smoking. In the UK, the lower education group was under represented. In the Netherlands, a large portion of the respondents did not disclose their income, which could have influenced the results if income was not equally distributed among these non-responders. Additionally, in the Netherlands, data were collected by web questionnaires only and in the UK also by telephone. This difference in data collection could have affected survey outcomes but was expected to be of minor influence on the results of this study. [39]

Practical implications

This study found that smokers who considered free/lower cost medication as a trigger to quit smoking were more likely to actually use cessation medication, and that smokers from the UK were more likely to have attempted to quit smoking. To promote smoking cessation it may therefore be beneficial to raise awareness of the availability of free cessation medication, for example through mass media campaigns or healthcare providers.

The finding that the association between mentioning free/lower cost medication as a trigger for thinking about quitting smoking and actual quit attempts was not influenced by education or income level suggests that free medication can motivate a large part of the smoking population to quit, and that this effect is not restricted to particular socioeconomic groups. Yet, since free medication is mentioned more often as a trigger to quit smoking by lower income smokers in the Netherlands in the current study and in previous research also in the UK, Ireland and Germany, [17] free medication may be an important strategy to decrease the socioeconomic gap in smoking.

Conclusion

Considering free/lower cost smoking cessation medication as a trigger for thinking about quitting smoking could, irrespective of smokers' income or education, be positively associated with quit attempts and may promote the use of cessation medication during this attempt. Therefore, making cessation medication freely accessible to smokers may be an important strategy to decrease smoking in the population.

Ethics

The protocol of this study was approved by the Research Ethics Board of the University of Waterloo, Canada.

Conflicts of interest

The authors declare that they have no competing interests.

What this paper adds

- In previous research, free/lower cost smoking cessation treatment has shown to be a trigger for thinking about quitting smoking for smokers with a lower education and income and this trigger was positively associated with making a quit attempt.
- It has been unclear whether mentioning free/lower cost medication as a trigger for thinking about quitting was associated with actual use of cessation medication and quit success and whether this association was dependent on smokers' income or education.
- This study showed that mentioning free/lower cost medication as a trigger for thinking about quitting smoking was positively associated with quit attempts in the UK and promoted the use of cessation medication in both the Netherlands and the UK, irrespective of smokers' education or income.

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Contributor statement

FAB and GEN conducted the statistical analyses together and FAB drafted the manuscript.

All authors contributed to the writing of the manuscript and revised and approved the final manuscript.

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APPENDIX 1

Proportion of smokers from the Netherlands and the UK who made a quit attempt, used medications and who quit successfully for respondents with different income levels and respondents who did not report their income (weighted data).

	Income level				
	Low	Moderate	High	Not reported*	p-value
Quit attempt (%)					
UK	37.4	38.2	50.0	50.0	0.012
NL	36.0	29.6	36.2	27.6	0.037
Used medication (%)					
UK	50.6	31.5	39.5	37.9	0.085
NL	26.3	23.3	15.4	18.6	0.214
Quit success (%)					
UK	31.2	27.2	41.9	41.4	0.107
NL	21.3	21.9	41.5	23.5	0.002

* In the UK 7.7% did not report their income, in the Netherlands 30.1%

APPENDIX 2

Baseline characteristics of respondents included in the analysis and respondents lost to follow-up for the Netherlands and the UK.

	United Kingdom			The Netherlands		
	Included in analysis (n = 768)	Lost to follow-up (n = 335)	p-value	Included in analysis (n = 1164)	Lost to follow-up (n = 256)	p-value
Gender						
Female (%)	52.6	47.2	0.102	49.0	45.3	0.301
Age						
18-24 years (%)	3.8	9.6	<0.001	17.9	23.4	<0.001
25-39 years (%)	21.9	30.1		27.8	36.3	
40-54 years (%)	42.2	36.1		30.7	28.9	
55+ years (%)	32.2	24.2		23.6	11.3	
Heaviness of Smoking Index						
0-1 (%)	27.0	36.3	0.011	31.1	27.2	0.075
2-4 (%)	65.4	57.4		62.2	69.0	
5-6 (%)	7.5	6.3		6.7	3.8	
Income level						
Low (%)	31.0	32.2	0.863	21.4	19.1	0.646
Moderate (%)	31.1	28.7		18.9	21.9	
High (%)	29.9	31.3		29.2	27.7	
Not reported (%)	7.9	7.8		30.5	31.2	
Educational level						
Low (%)	21.4	16.6	0.054	26.3	26.0	0.770
Moderate (%)	27.2	24.4		46.9	49.2	
High (%)	51.5	59.0		26.7	24.8	